Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	(modif$2 adj4 filter adj4 taps adj4 based$2 adj4 data adj4 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:36
L2	4	(modif$2 adj4 filter adj4 taps)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:35
L3	7	(modif$4 adj4 filter$4 adj4 taps$4)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:35
L4	5	(filter adj4 taps adj4 based$2 adj4 data$4 adj4 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:30
L5	5	(filter$4 adj4 taps$4 adj4 based$2 adj4 data$4 adj4 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:28
L6	1	(mean$4 adj4 square$4 adj4 error$2 adj4 echo$4 adj4 canceler$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:08
L7	5	(echo adj2 canceller$2 adj2 filter adj2 rate)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:49
L8	1216	(meansquare$4 adj4 error$4 adj4 redu$4 echo$4 adj4 canceler$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:09
L9	4731	(echo$4 adj4 cancel$4 meansquare$4 adj4 error$4 adj4 redu$4)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:10
L10	881	(370/286,282).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11
L11	369	9 and 10	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11
L12	120	8 and 10	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:12
L13	346	(echo$2 adj2 canceller$2 adj2 filter$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:27
L14	46	11 and 13	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:27
L15	488	(rate$2 same echo same cancel$4 same filter)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:33

L16	423	9 and 15	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:33
L17	58	10 and 15	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 13:40
L18	19	17 and 14	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 13:40
L19	530	(echo adj2 cancel$4 adj2 filter)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:38
L20	679	(plural$4 adj2 data$4 adj2 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:41
L21	2	19 and 20	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:41
L22	97537	(data$4 adj2 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:41
L23	159	19 and 22	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:42
L24	16	10 and 23	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:55
L25	19140	filter same (length tap) same (rate)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:58
L26	491	25 and (echo with cancella$)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:57
L27	634	25 and (echo with cancel$)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:57
L28	198	25 same (echo with cancel$)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 14:57
L29	137	25 same (echo with cancel$)	USPAT	OR	ON	2005/11/30 14:58
L30	1821	filter same (length tap) same (data with rate)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 15:49
L31	25	30 same (echo with cancel$)	USPAT	OR	ON	2005/11/30 15:50
L32	138	(adjust$ modif$) same (filter) same (tap length) same (data with rate)	USPAT	OR	ON	2005/11/30 15:02
L33	12	32 and (echo with cancel$)	USPAT	OR	ON	2005/11/30 15:02

L34	1940	filter same (temporal length tap) same (data with rate)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 15:51
L35	25	34 same (echo with cancel$)	USPAT	OR	ON	2005/11/30 15:51
L36	1940	filter same (temporal length tap) same (data with rate)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 15:51
L37	45	36 same (echo with cancel$)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/11/30 15:52
S1	881	(370/286,282).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	(modif$2 adj4 filter adj4 taps adj4 based$2 adj4 data adj4 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:36
L2	4	(modif$2 adj4 filter adj4 taps) _modify filter taps_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:35
L3	7	(modif$4 adj4 filter$4 adj4 taps$4) _modify filter taps_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:35
L4	5	(filter adj4 taps adj4 based$2 adj4 data$4 adj4 rate$2) _filter taps based data rate_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:30
L5	5	(filter$4 adj4 taps$4 adj4 based$2 adj4 data$4 adj4 rate$2) _filter taps based data rate_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:28
L6	1	(mean$4 adj4 square$4 adj4 error$2 adj4 echo$4 adj4 canceler$2) _mean square error echo canceler_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:08
L7	5	(echo adj2 canceller$2 adj2 filter adj2 rate) _echo canceler filter rate_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:49
L8	1216	(meansquare$4 adj4 error$4 adj4 redu$4 echo$4 adj4 canceler$2) _meansquare error reduction echo canceller_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:09
L9	4731	(echo$4 adj4 cancel$4 meansquare$4 adj4 error$4 adj4 redu$4) _echo canceller meansquare error reductor_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:10
L10	881	(370/286,282).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11
L11	369	9 and 10 _Claim 2 'echo canceler mean square error reduction'_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11
L12	120	8 and 10 _claim 2 'mean square error reduction'_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:12
L13	346	(echo$2 adj2 canceller$2 adj2 filter$2) _echo canceler filter_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:27
L14	46	11 and 13 _claim, 2 'echo canceler mean square error reduction, & echo cancelation filter_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:27
L15	488	(rate$2 same echo same cancel$4 same filter) _rate echo canceller filter_	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:33

L16	423	9 and 15	*Echo canceller mean square error reduction and rate echo canceller filter*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 12:33
L17	58	10 and 15	*Claim & rate echo canceller filter*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 13:40
L18	19	17 and 14	*Claim & rate echo canceller filter and claim & echo canceller mean square error reduction & echo cancellation filter*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 13:40
S1	881	(370/286,282).ccls.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:11
S2	76275	"379"/$6.ccls.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:45
S4	346	(echo$2 adj2 canceller$2 adj2 filter$2) *echo canceller filter.*		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:26
S6	342	(echo adj2 canceller adj2 filter) *echo canceller filter*		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 11:37
S7	9	(echo adj2 channel adj2 model) *echo channel model*		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:31
S8	1	"5363321".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:34
S9	1	"5524089".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:35
S10	1	"5570310".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:36
S11	1	"5600581".pn.	*IDS*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:36
S12	1	"5604691".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:37
S13	1	"5642305".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:37
S14	1	"5709801".pn.		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:38

S15	1	"5703801".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:38
S16	1	"5909384".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:39
S17	1	"5940312".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:40
S18	1	"5941939".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:55
S19	1	"5653234".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:59
S20	1	"5553014".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 12:57
S21	1	"5535150".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 13:00
S22	1	"5473686".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 13:01
S23	1	"4995030".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 13:01
S24	1	"4935919".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 13:02
S25	1	"4823382".pn.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 13:02
S26	1562	(370/286,282,201,289,290,291).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:44
S27	2075	(375/222,221).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:45
S28	2075	(375/222,221).ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:45
S29	76275	"379"/$6.ccls.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:46

Handwritten annotations: "IDS." (grouping S15–S18), "Sub IDS Ref" (grouping S19–S24), "Clam Search" (grouping S26–S29)

S30	346	(echo$2 adj2 canceller$2 adj2 filter$2)	*echo canceller filter*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 11:25
S31	2691	(echo$2 adj2 canceller$2)	*echo canceller*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:18
S32	5	(echo adj2 canceller$2 adj2 filt adj2 rate (5 variant))					2005/11/29
S33	13	(echo adj2 cancell$4 adj2 filter adj2 length)	*echo cancella filtu length*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 14:58
S34	679	(plural$4 adj2 data$4 adj2 rate)	*plural data rate*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:24
S35	152	(reduce$4 adj2 cpu$4 adj2 time)	*reduced capture time*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:17
S36	20	(polynomia$4 adj2 fittin$4 adj2 curve)	*polynomial fitty curve*	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:54
S37	55	(fittin$4 adj2 polynomial$4 adj2 curve represent44 adj2 filter adj2 length)		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:16
S38	1	(fittin$4 adj2 polynomial$4 adj2 curve adj2 represent$4 adj2 filter adj2 length) → *Afflict* ✓		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:06
S39	1	S26 and S37 → *Applet* ✓		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:17
S40	0	S27 and S37		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:17
S41	0	S28 and S37		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:17
S42	1	S29 and S37		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:17
S43	492	S26 and S31		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:19
S44	182	S27 and S31		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:19
S45	182	S28 and S31		US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:19

S46	1087	S29 and S31	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:19
S47	0	S26 and S36	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:20
S48	0	S27 and S36	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:20
S49	0	S28 and S36	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:20
S50	0	S29 and S36	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 15:20
S54	3	S26 and S34	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:52
S55	679	(plural$4 adj2 data$4 adj2 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:25
S56	3	S26 and S55	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:25
S57	97537	(data$4 adj2 rate$2)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:25
S58	324	S26 and S57	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:26
S59	1069	S27 and S57	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:26
S60	1069	S28 and S57	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:26
S61	2548	S29 and S57	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:27
S62	40	S58 and S59	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/30 10:32
S63	10	(echo adj2 canceller$2 adj2 filter adj4 rate$4)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:40

S64	10	(echo$4 adj2 canceller$2 adj2 filter$4 adj4 rate$4)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:41
S65	0	S36 and S58	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:52
S66	21	(polynomia$4 adj2 fittin$4 adj2 curve$4)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:54
S67	0	S26 and S66	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:54
S68	0	S27 and S66	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:55
S69	0	S28 and S66	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:55
S70	0	S29 and S66	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2005/11/29 17:55